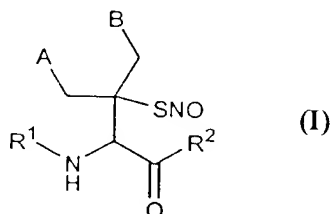


CLAIMS

1.- S-nitrosothiols derivatives of penicillamine or glutathione, and its pharmaceutically acceptable salts, which correspond to following general formula(I)



in which:

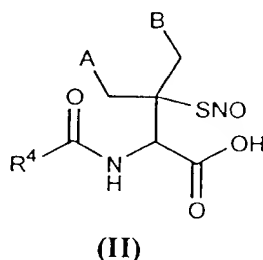
A and B are phenyl groups or together form the rest -CH₂-Q-CH₂- constituting a ring of six units in which Q represents an atom of oxygen, of sulfur, or a group N-R³, in which R³ is hydrogen or an alkyl group C₁-C₄;

R¹ is an acyl rest, which may be an aliphatic acyl group C₁-C₅ or a rest of glutamic acid bound via its non amino acid carboxyl;

R² is a hydroxyl group or a glycine rest bound via a peptide bond;

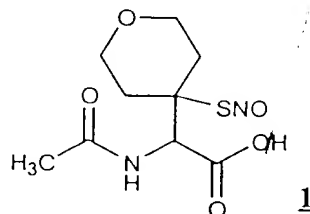
with the proviso that if R¹ is an aliphatic acyl rest then R² is a hydroxyl group, and if R¹ a rest of glutamic acid then R² is a glycine rest.

2.- S-nitrosothiols of claim 1, which corresponds to following general formula (II)

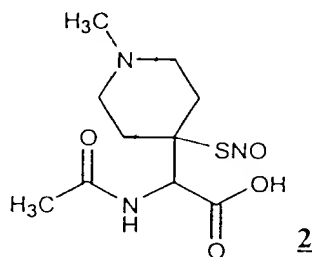


in which A and B have the values mentioned above and R¹ is an alkyl group C₁-C₄.

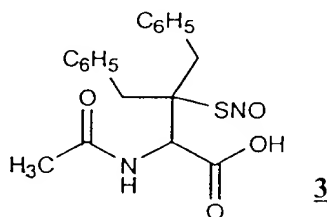
- 3.- The compound of any of the claims 1 or 2,
5 N-acetyl-2-amino-2-[4-(4-S-nitrosomercaptotetrahydropyran)] acetic acid (1).



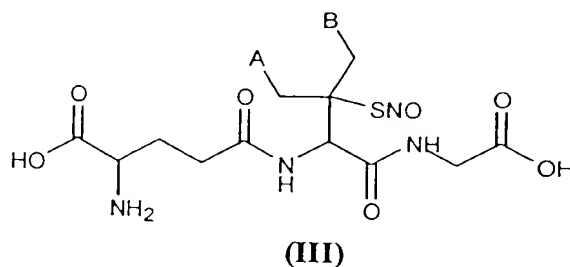
- 4.- The compound of any of the claims 1 or 2,
10 N-acetyl-2-amino-2-[4-(4-S-nitrosomercapto-1-methylpiperidin)]acetic acid (2).



- 5.- The compound of any of the claims 1 or 2,
15 N-acetyl-2-amino-3-benzyl-3-S-nitrosomercapto-4-phenyl-butanoic acid (3).

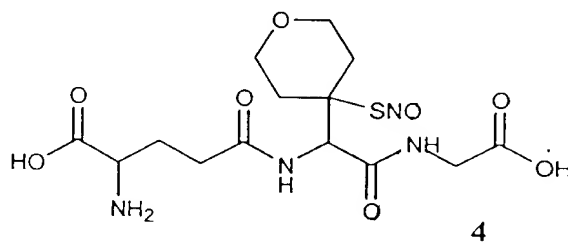


- 6.- S-nitrosothiols of claim 1, which corresponds to following general formula (III)
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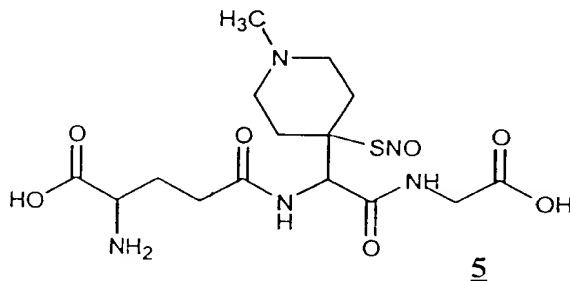


in which A and B have the values mentioned above.

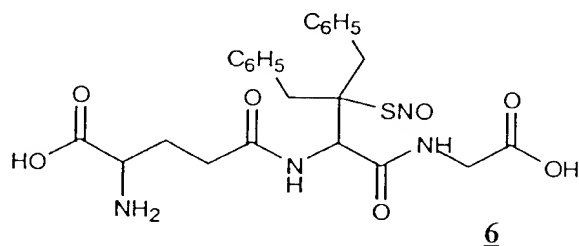
7. The compound of any of claims 1 or 6, N[N-γ-
5 L-glutamyl-2-amino-2-(4-(4-S-nitrosomercapto)tetrahydropyr-an))acetyl]-glycine (4).



- 8.- The compound of any of claims 1 or 6, N[N-γ-
10 -L-glutamyl-2-amino-2-(4-(4-S-nitrosomercapto-1-methylpipe-ridin))acetyl]-glycine (5).



- 9.- The compound of any of claims 1 or 6, N[N-γ-
15 -L-glutamyl-2-amino-3-benzyl-3-(S-nitrosomercapto)-4-phenylbutanoyl]-glycine (6).



10.- The use of the S'-nitrosothiols of any of
the claims above for the manufacture of a medicament for
5 the treatment of circulatory dysfunctions.

11.- The use of claim 10 for the manufacture of
a medicament for the treatment of dysfunctions of the
cardiovascular system.